

DISRUPTION ON REGIONAL ROAD MANAGEMENT

Dedy Gunawan

Directorate General of Highways
Ministry of Public Works and Housing
bimtekjd@yahoo.co.id

Slamet Muljono

Directorate General of Highways
Ministry of Public Works and Housing
smuljono@pu.go.id

Abstract

This paper describes the disruption of Directorate General of Highway, Ministry of Public Works and Housing, in improving the good governance and financing systems for the execution of regional road. Together with Australia Government through Indonesia Infrastructure Initiative Program, Directorate General of Highway made a grant program called Provincial Road Improvements and Maintenance in the Province of Nusa Tenggara Barat. This program is delivered through pre-financing by local budget and reimbursement grant scheme maximum of 40% by the Central Government with incentives around 10% from total program. Provincial Road Improvements and Maintenance applies good governance and open government principles by involving the road authorities, service provider, and road users through Road Transport and Traffic Forum. The Provincial Road Improvements and Maintenance program successfully improved the stability and service of roads in the Province of Nusa Tenggara Barat with the optimum budget. The program also encourages women participation in order to improve gender equality. As a result, Bappenas with the Ministry of Public Works and Housing and Ministry of Finance plan to replicate this program for the broader coverage in 2018.

Keywords: regional road, road stability, road service, road maintenance, road improvement

Abstrak

Makalah ini menjelaskan persoalan yang dihadapi oleh Direktorat Jenderal Bina Marga, Kementerian Pekerjaan Umum dan Perumahan Rakyat, dalam memperbaiki tata pemerintahan dan sistem pembiayaan yang baik untuk menangani jalan daerah. Bersama Pemerintah Australia, melalui Program Inisiatif Infrastruktur Indonesia, Direktorat Jenderal Bina Marga membuat program hibah yang disebut *Provincial Road Improvements and Maintenance* di Provinsi Nusa Tenggara Barat. Program ini disampaikan melalui *pre-financing* dengan skema kompensasi anggaran daerah dan penggantian maksimum sebesar 40% oleh Pemerintah Pusat dengan insentif sekitar 10% dari total program. *Provincial Road Improvements and Maintenance* menerapkan tata pemerintahan yang baik dan prinsip-prinsip pemerintahan yang terbuka dengan melibatkan pihak penyelenggara jalan, penyedia jasa, dan pengguna jalan melalui Forum Lalulintas Jalan. Program *Provincial Road Improvements and Maintenance* berhasil memperbaiki kemantapan dan pelayanan jalan di Provinsi Nusa Tenggara Barat dengan dana yang optimal. Program ini juga mendorong partisipasi perempuan dalam rangka meningkatkan kesetaraan gender. Hasilnya adalah bahwa Bappenas bersama Kementerian Pekerjaan Umum dan Perumahan Rakyat dan Kementerian Keuangan berencana untuk mereplikasi program ini untuk cakupan yang lebih luas pada tahun 2018.

Kata-kata kunci: jalan daerah, kemantapan jalan, pelayanan jalan, pemeliharaan jalan, peningkatan jalan

INTRODUCTION

According to the road administration, road is classified into national road, provincial road, regency/municipality road and rural road. The National road is under the management of Directorate General of Highway (DGH), Ministry of Public Works and Housing (PUPR). Meanwhile, the other roads (usually called as regional road) are under

respective local government responsibility. Provincial road become provincials government responsibility, Regency/ municipality/rural road become regency/municipality government responsibility. According to DGH's data in 2014, national road already 94% in stable condition, but provincial road still 65%, and regency/municipalities road still 58% in stable condition. That figure still far from target that has been set in "Rencana Pembangunan Jangka Menengah Nasional" (RPJMN) 2015-2019, which is 75% and 65% stable for provincial road and regency/municipality road respectively. Whereas the total length of provincial roads and regency/municipality roads contributes approximately 90% of the total length of road network in Indonesia. RPJMN also has set the strategy in order to achieve the target which are (i) improving the Special Allocation Fund (DAK) mechanism and (ii) applying the cost sharing scheme between APBN and APBD with an incentive.

The local government cannot rely on their APBD since only around 10-15% of their APBD can be allocated for road infrastructure development. It cannot cope with the required budget for maintenance and improving their road stability. It is required financing innovation even disruption in order to improve local government finance capability. In another aspect, the road management is still far away from the ideal concept. Many of the local government still do small contract, such Rp 250 million per contract package. There is also a tendency of policy makers to prioritize the construction of new roads and reconstruction compared with routine and periodic maintenance. That kind of policy can deteriorating road faster and shorten road service life. Thus, road handling activities only revolve around this cycle: reconstruction-damage-rehabilitation that requires more expensive costs when compared to the routine maintenance of roads on time, quality, and cost. We need disruption also in the local road management.

As it is stated in RPJMN, Directorate General of Highway already do the effort to solve those problems by increasing the local government roles in regional road infrastructure development through *Provincial Road Improvements and Maintenance* (PRIM). The purpose of PRIM program is to improve local government capability in management and maintenance of provincial and regency road; including encourage the local government to increase the budget allocation for road maintenance by giving reimbursed grant maximum 40% from road budget that have been funded first using the local budget (APBD) plus incentive to fulfill good governance aspect. The Value for Money is the a basic principle in the PRIM approach.

The Government of Indonesia (GoI) stated in Medium-Term National Strategic Planning 2015-2019 report that Rp 5.519 Trillion rupiah will be needed for infrastructure development in Indonesia. GoI already made an analysis in that report that almost 80% of the budget's source for infrastructure development is from outside the state budget or local public budget (Non-APBN or non-APBD). Government of Indonesia has been publishing several laws and regulations to support acceleration of infrastructure development and to meet budget requirements for 2015-2019. One of the aspects that arranged in that laws and

regulation is the financing scheme of infrastructure development. Financial scheme that can be applied in infrastructure project are as follows.

- 1) State/Local Public Budget (APBN/APBD); this scheme can be used if it is financially not feasible.
- 2) State/Regional Owned Enterprise; this scheme can be used if it is economically feasible but not feasible yet in financial aspect.
- 3) Supported Public Private Partnership; this scheme can be used if it is at least not financially feasible in first several years.
- 4) Public Private Partnership and Business to Business Scheme; this scheme can be used if it is financially and economically feasible.

GoI give many alternatives in terms funding sources. Funding sources that allowed by GoI are such as: State public budget, Local public budget, Transfer fund from central to regional, Grant, State loan, Commercial loan, State Financial institution, CSR, Environmental fund, Multilateral bank, and Capital market.



Figure 1 Source Funding Alternatives (PT SMI, 2015)

From the funding sources alternatives above, there are two alternatives that can be used by central government to support local government infrastructure development, which are transfer fund from central to regional and grants from central to regional. There are many varieties of transfer funds from central to regional in Indonesia, such as “Dana Alokasi Khusus (DAK)”, “Dana Alokasi Umum (DAU)”, “Dana Insentif Daerah (DID)”, etc. The second alternative is grants from central to regional. Grant from central to regional is granting by the transfer of the rights to something from the central government to the local government which has been specifically designated and made through the agreement. Source of Grant can be from state revenue, foreign grants, and foreign loans. All of those support schemes using lump sum method for the execution. So, central government control is weak on the spending of that grants. The tools of central government to control local government only from local government report. The financial relation between Central Government and Local Government is shown in Figure 2.

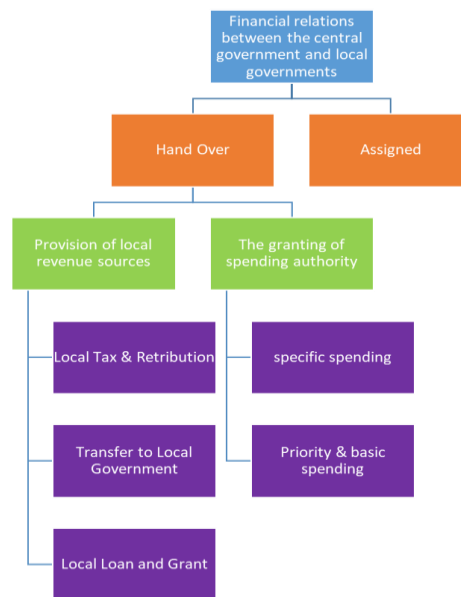


Figure 2 Financial Relation between Central and Local Government

PROVINCIAL ROAD IMPROVEMENT AND MAINTENANCE

Bappenas, Ministry of Finance, and Directorate General of Highway assisted by the Australian Government introduce the Provincial Road Improvement and Maintenance (PRIM) Pilot Program. This PRIM will achieve the value for money through improving of good governance and quality implementation of provincial road in Nusa Tenggara Barat (NTB) Province. PRIM is using a different mechanism comparing to other scheme of central government support funds to local government (Indonesia Infrastructure Initiative, 2017). PRIM program is employing a reimbursement method, where local government must pre financing the construction first. Local government will get the reimbursement after the physical exercise is done and verification is already conducted by verification team. Maximum of total amount of reimbursement for local government is 40% from value that can be accounted according to verification result or with maximum value as stated in Grant letter approval that published by Ministry of Finance. Central Government referring to Reference Unit Cost (RUC) that listed in Project Management Manual (PMM) for each eligible output in disbursing the grants to Local Government. Grants execution is written on Grant Forwarding Agreement between Ministry of Finance or Ministry of Finance's attorney and local government major referring to Minister of Finance regulation No 188/2012 about Grants from Central Government to Local Government. The pattern of grants in this program is based on measurable performance results of work undertaken by the Local Government based on verification results conducted by the DGH Technical Team (Directorate General of Highways. 2016).

PRIM program is different from other road program because there is verification stage in PRIM Program that performed by technical team with Program Management

Consultant (PMC) assist (Widjajanto et al, 2017). Verification will conducted after the completion of physical work by Local Government and Local Government make verification request to the technical team. The technical team consists of several elements from several Ministries/Institutions, ie Ministry of PUPR, Ministry of Finance, Ministry of Home Affairs, and Ministry of PPN/Bappenas. After verification process occurred, technical team with PMC create a verification report which will be given to Ministry of Finance for disbursement of grants according to verification result. The main comparison between PRIM and non-PRIM program are as shown in Figure 3.

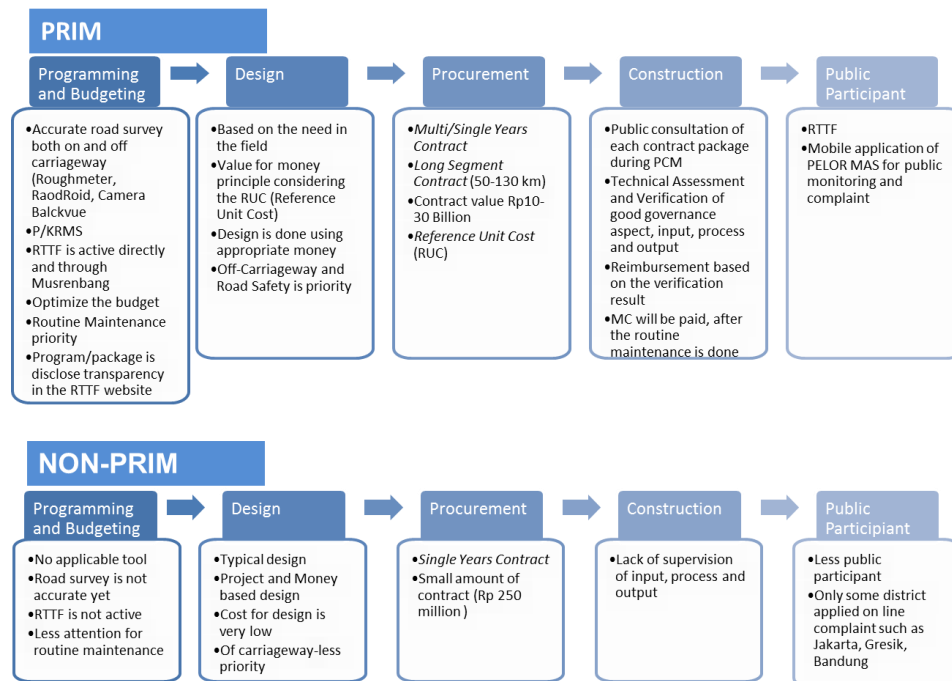


Figure 3 Differentiate Between PRIM and Other Scheme

The grant will comprise of Incentive for Good Governance and 40% reimbursement of the physical works program. Grant disbursement can be executed after road operators completed the work and technical team verify that works. The incentive for Good Governance is consisting of many items which are increased at every stage of verification process. Since verification V (2016), There is a penalty around $(1 / [\text{number of verification items per year}] * \text{allocated incentive value per year})$. There some example of good governance items should be fulfilled:

- 1) Road programming and budgeting should use the P/KRMS (provincial/Kabupaten Road Management System) tool.
- 2) Information of the budget allocation should be announced in the website.
- 3) Contract must be signed in agreed time after the procurement is done and its amendment must be agreed by the contract observer.

- 4) Procurement Unit should issue the Standard Bidding Document that all the consultant/contractor must have the good performance, never have a show cause meeting level III and never have penalty within the 2 last year.
- 5) Already have program and implementation of the training.
- 6) RTTF already comply with the administration aspect, develop SOP, do monthly meeting, active in Musrenbang, review on PRMS result and public consultation, RTTF website is update every month and response at least 70% of public compliant .
- 7) Technical staff in Public Work Department is comply with WISN (Working Indicator Staffing Need) analysis.
- 8) Contractor, Consultant and Project Manager already trained before construction is started and signed the Pact of Integrity.
- 9) During Pre-Construction Meeting (PCM) there should be a public consultation with the affected people along the project corridor and attended by RTTF.
- 10) Head of Public Work Department must signed the letter of integrity and will conduct the work in the best effort to meet the technical specification and if there is a fail will give sanction to the Project Manager, Consultant and/or Contractor.

Grant disbursement mechanism in PRIM Program are as follows (see Figure 4 and Figure 5):

- 1) Regional road operators create a works planning and programming for current fiscal year.
- 2) Regional road operators make details engineering design and bidding document.
- 3) Procurement process for consultant and contractors
- 4) Works execution by contractors under supervision of Project Implementation Unit and Project Implementation Unit Consultant.
- 5) Road Transport and Traffic Forum and Regional Road Operators complete all the prerequisite for verification.
- 6) Regional road operators request for verification to the technical team of DGH.
- 7) Technical team and Project Management Consultant conduct the document and physical work verification.
- 8) Verification report created by Technical Team with Project Management Consultant.
- 9) Technical team submitted the report to the DGH and Local Government
- 10) DGH submit the disbursement recommendation to the Ministry of Finance.
- 11) Local Government request for grant disbursement to Ministry of Finance.
- 12) Ministry of Finance disburse the grants according to the recommendation from technical team.

Local Government can use that Incentive for several activities, which are:

- 1) Human resource development, such as training, technical assistance, workshop, etc.
- 2) Increasing the role of RTTF.
- 3) Procurement of survey tools and its maintenance.
- 4) Office equipment for local government and RTTF.

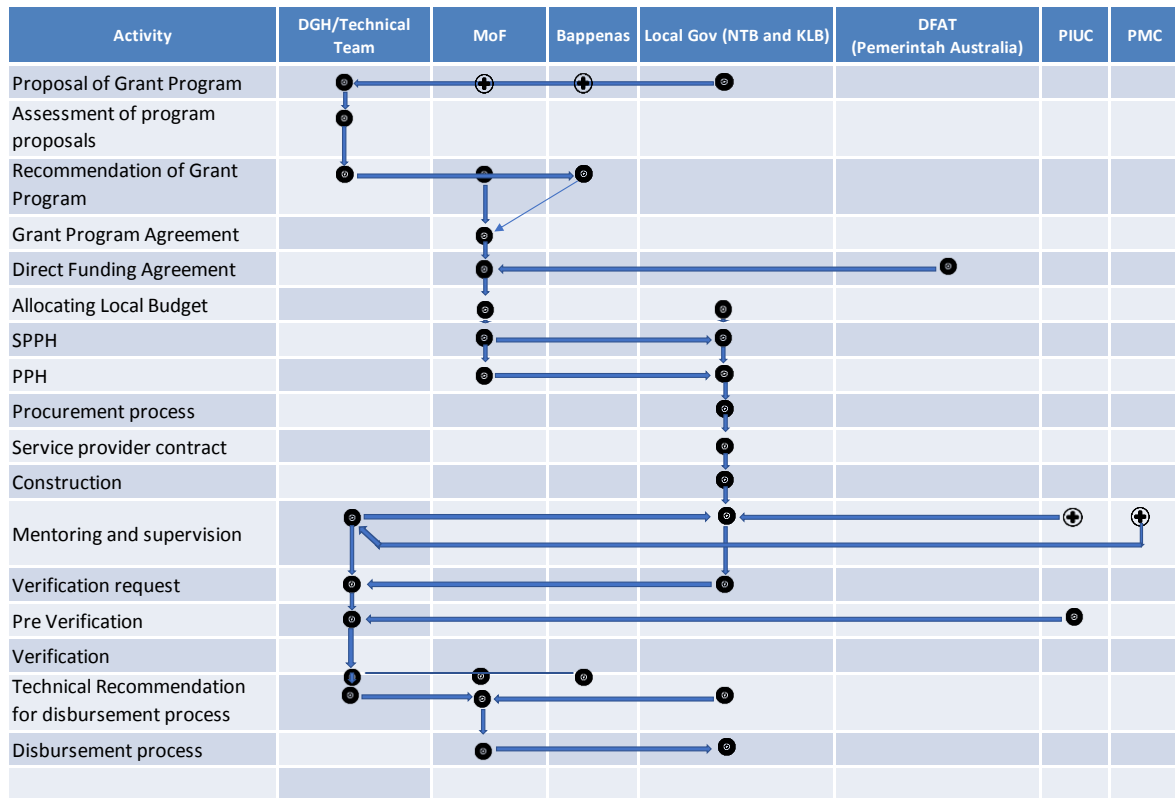


Figure 4 PRIM Reimbursement Process

The data indicates that local governments are trying to meet the agreed quality requirements in published project management manuals. It can be seen on the graph, during the year 2013-2016 totaling grant funds disbursed reached Rp 150 Billion Rupiah from total Rp 172 Billion Rupiah. It shows the commitment of local governments to meet the agreed requirements and prove that local governments want to change the mindset with just a little encouragement. Furthermore, the innovations made in the PRIM Program are the implementation of the Long Segment contract. The contract is made for 50-135 km, in multi-years based contract, use different Bill of Quantity (BoQ) for each category of works, and payment can be executed after the routine maintenance is done. And the second innovation is PRIM program introducing Project Management Manual that a guidelines during the execution of physical work and reimbursement process. As mentioned earlier, PRIM Program seeks to impose a new mindset to local governments on road management, ie road operators should prioritize routine maintenance work and backlogs and minor works compared to new road construction and road improvements. The mindset is trying to be applied so that the existing road stability is maintained and/or even increased so that it can meet the target of RPJMN 2015-2019.

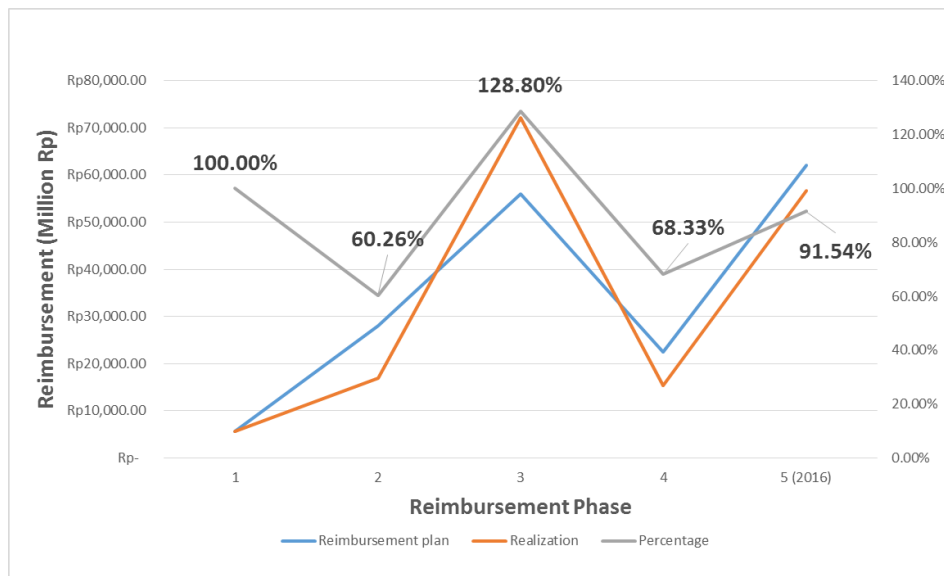


Figure 5 PRIM Reimbursement Value in NTB Province (2013-2016)

It can be seen in Figure 6 that the stability of roads from NTB Province continues to increase although budget allocations for road operations have no particular tendency, sometimes up sometimes down. It indicates that budget allocation for road operation is not the main factor to improve road stability but implementing right financing scheme and prioritize routine maintenance which can improve road stability. Road governance and public involvement in road monitoring to improve transparency, through the RTTF, is also important in the organization of good roads. Figure 7 shows some comparison of conditions on a road in NTB Province before and after the implementation of the PRIM Program.

PRIM also consider the equity issues. Based on the Peer Review (2017), females accounted for about 7%-13% of personnel provided by contractors; 0%-5% for swakelola; 7%-9% for supervision consultants; 17% in meetings of RMMT; 10%-15% in public consultations; and 14%-20% in activities (see Figure 8). These percentages reflect social attitudes about involvement of women in road works. Improving gender equity in terms of participation, access, leadership, decision making, access to resources and benefits of development is an overall goal of gender strategy. PRIM road maintenance and improvements have helped make roads better which in turn improved mobility by women and girls and their accessibility to markets, schools, and health facilities and expanded their choices. Improved shoulders on PRIM roads have increased road safety and convenience, especially for children (male and female) walking to school. Further, women made sales to workers during implementation of road maintenance and to the public afterwards (fruits, petrol). Also, new businesses were created by women after road conditions were improved. Incomes also increased for businesses owned by women, mainly due to higher traffic volumes.

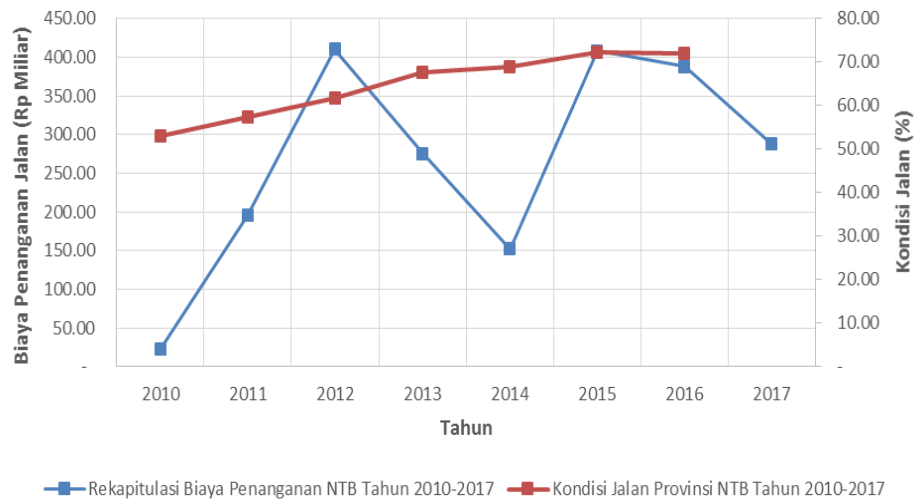


Figure 6 Road Stability and Budget Allocation for NTB Province Road Year 2010-2016



Figure 7 Before and After PRIM Program



Figure 8 Participation of Women (KIAT, 2017)

In order to improve the transparency and public participant/oversight, begin in 2017, the implementation of Construction Sector Transparency (CoST) was introduced and applied in 2 (two) contract packages. CoST's Infrastructure Data Standards (IDS) support disclosure by requiring proactive disclosure of 40 data points which cover the full project cycle and reactive disclosure that should be provided upon request. Based on experience with CoST in other countries, success factors for disclosure center on: (1) being concise, and (2) creating website and connections which are easy to upload and easy to search and access. In the case of NTB, 26 of the 40 items already exist in internal systems (World Bank, 1998).

EXPANSION OF THE PRIM PROGRAM

PRIM is already claimed successfully implemented for provincial road management in NTB Province. PRIM already change the mind set and culture of the Government component related road, Consultant, Contractor, and society in delivering the good road governance and service quality. Begin in 2017, the Central Government already decided to expand the PRIM for Kabupaten Road and applied in Kabupaten Lombok Barat (WLK).

The result shows that the WLK is more successfully compare than the NTB Province. In 2017, the reimbursement of WLK is approximately around 97.2%, but the NTB province around 87.4%. The reimbursement value indicates the degree of delivery in good governance and construction quality.

From 2018 and beyond, the physical grant program in NTB province will be eliminated and there will be only the incentive of the good governance. The government of

NTB will conduct the road management using APBD money and employ the PRIM management principle. Meanwhile for the WLK, the PRIM program is fully applied until 2019 in order to get the full 1 cycle programme. The DGH already anticipated this condition, as it is already agreed the concept of transition as shown in Figure 9.

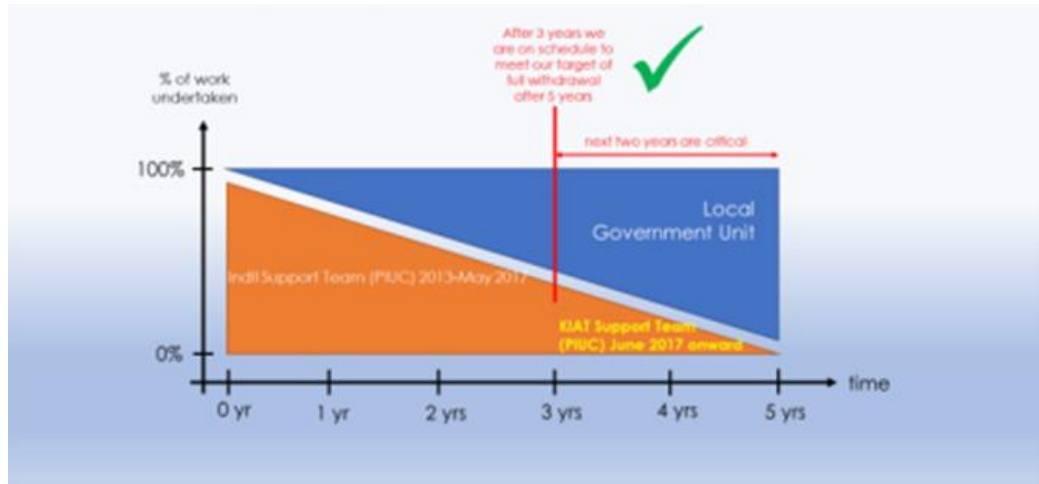


Figure 9 PRIM Transition Concept

Therefore in 2016, the NTB Province already established Road Maintenance Management Team (RMMT). The RMMT was established to support the DPU in taking the lead role in PRIM and increase chances of sustainability. The Governor of NTB formally established RMMT for 2016-2018 via Decree No. 620-742 of 2016 issued on 2 September 2016. RMMT will consist of divisions in charge of planning, implementation, swakelola in Lombok, swakelola in Sumbawa-Sumbawa Barat, swakelola in Bima-Dompu, coordination with the RTTF, and Planning and Budgeting. Even though the RMMT is not much more than a name for the existing staff in DPU involved in road maintenance, they became part of a recognizable entity, with shared challenges. RMMT/NTB is even thinking seriously of becoming a reference center for regional roads in Indonesia. In fact, some of the regional governments have already come to NTB in order to gain and take a successful experience of the NTB Province and WLK in delivering the good road maintenance (KIAT, 2017).

Learnt from the implementation of PRIM scheme in NTB, the DGH already propose to the Ministry of Finance and Bappenas to scale up the program to other regions 'Hibah Jalan Daerah' (HJD) which is funded purely through Rupiah Grant. Although, one of the problem that must be resolved by Local Government is how to pre-financing the works because sometimes Local Government has inadequate local budget to financing the work before disbursement.

There are many alternatives for the Local Government to pre-financing the works first, such as CSR, collaboration with financial institution (PT SMI) and etc. The main objective would be improving the condition of regional roads in Indonesia but at the same time serving as a mechanism to increase accountability, improve governance and

management, upgrade performance, and increase value for money for Central and Local Governments (World Bank, 2008).

The main features proposed for the HJD are (KIAT, 2017):

- 1) Grant contributions to act as an incentive to strengthen delivery and governance. It is proposed to allocate about 5% of the grant to reward good governance; 10% for preparation of works programs and related collection of data, detailed engineering designs and supervision of construction; and the remaining 85% to reimburse up to 100% of the cost of those physical works which meet agreed quality standards based upon independent output verification.
- 2) Commitment of LG (Local Government) to quality at the highest levels (Governor/Bupati).
- 3) Commitment of LG to objective and independent verification as the basis for reimbursement of cost of physical works and rewarding good governance.
- 4) External scrutiny of performance through the RTTF and possibly the public using community based mobile phone apps. Ensuring adequate representation of civil society and road users, training, establishment of Standard Operating Procedures and appropriate budgets is required for RTTFs to become more effective.
- 5) Works to be funded should be based on rational planning and budgeting procedures using the Provincial/Kabupaten Road Management System (P/KRMS) developed for NTB and the Kabupaten Road Management System (KRMS). This includes regular network-wide surveys of road condition and traffic volumes which are used to plan maintenance interventions at the optimum time to avoid severe deterioration of road pavements.
- 6) Works to be funded may include routine maintenance, periodic maintenance, rehabilitation/ betterment, widening to increase traffic safety and capacity, and new roads (especially those which provide connectivity or year round access). There would be an initial focus on routine maintenance and backlog of maintenance and other minor works, (primarily off-carriageway works including shoulders and drainage) by initially allocating at least 15%-20% of the HJD budget to these works.
- 7) Strengthen existing procedures and undertake capacity building in all involved organisations (central government, especially DGH, local governments, RTTFs, national consultants, national contractors and their sub-contractors) to increase the probability of success and sustainability.
- 8) Commitment of LGs to multi-year contracts.
- 9) Commitment of LGs to provide agreed budgets to pre-financing of works is essential.

It is best to start with a limited number of LGs and increase the number with time as more experience is gained during implementation and budgets for HJD are increased. The LGs to be included in the hibah program should be selected on basis of transparent, fair and rational criteria. However, the approach and procedures to be followed in the first tranche for 2018 should be capable of scaling up to ultimately cover most provinces and

districts in Indonesia. It should be recognised that changing mind-sets and achieving good performance do not happen overnight. Consequently, once an LG has been selected, it should stay in the program for at least three years (unless it violates key provisions of the program). Achieving equity among LGs is better done by adding new LGs over time than by dropping existing LGs.

CONCLUSION

From the discussion in this study, it can be concluded that changes in the financial schemes, implement the good governance, and open government principle through PRIM Program can improve road stability and meet the value for money. It is also supported by the change of mindset applied in the PRIM Program that road operators should prioritize routine maintenance and backlog and minor works compared to the improvement or construction of new roads.

Good governance in road operators as well as public involvement in road supervision also becomes a priority in the implementation of regional roads that usually have a small budget. In addition, there should be re-organization structure in Directorate General of Highways, because in its current organization, there are only two sub-directorate for facilitating the regional road technical support and management.

REFERENCES

- Directorate General of Highways. 2016. *Project Management Manual Amandement 4*. Jakarta.
- Indonesia Infrastructure Initiative. 2017. *Extension Program Milestone 4: PIUC Lessons Learned 2013-2015*. Jakarta.
- Kemitraan Indonesia Australia untuk Infrastruktur (KIAT). 2017. *Peer Review of PRIM Program*. Jakarta.
- Widjajanto, A., Gunawan, D., and Mirza, M. 2017. *Tranformasi Pembinaan Penyelenggaraan Jalan Daerah: Studi Kasus Pilot Project Provincial Road Improvement and Main-tenance di Nusa Tenggara Barat*. Palembang: Sriwijaya University.
- Widjajanto, A., Gunawan, D., and Mirza, M. 2017. *Innovation on Financial Scheming of Regional Road Development for Sustainable Infrastructure: Case Study Pilot Project Provincial Road Maintenance & Improvements (PRIM), Nusa Tenggara Barat*. The 5th Gadjah Mada International Conference on Economics and Business, Sustainable Development: Challenge and Opportunity in Developing Countries. Yogyakarta.
- World Bank. 1998. *Road Deterioration in Developing Countries Causes and Remedies*. Washington, DC.

World Bank. 2008. *Team-Based Routine Maintenance of Rural Road, a Study on the Potential Implementation in China*. Washington, DC.